STUDIES IN THE TREATMENT OF MALARIA

XVII. ORAL ADMINISTRATION OF QUINOTOXIN FOR TWO CONSECUTIVE DAYS ONLY IN SIMPLE TERTIAN MALARIA

BY

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At the suggestion of Professor Ramsden we decided to test the action of quinotoxin* on the parasites and the fever in cases of simple tertian malaria.

A solution of quinotoxin hydrochloride was prepared for us by Professor Ramsden.

A dose corresponding to grains 5 of this salt was given orally to five patients (914-918), and grains 10 to four patients (919-922), on each of two consecutive days.

Blood examinations were made daily in all cases.

In the temperature charts:—

Q.T. = oral administration of solution of quinotoxin.
gr. = grains of hydrochloride of quinotoxin.
T. = simple tertian trophozoites or schizonts.
G. = simple tertian gametes.
Neg. = no parasites found.
* = oral administration of solution of quinine sulphate.

* Professor Ramsden deals with the pharmacology of quinotoxin in a subsequent paper (these *Annals*, p. 233).

The results are summarised in the Table, where the following information is also given:—Place of infection, and interval in months between present treatment and (*a*) first admission to a hospital for malaria; (*b*) leaving infected area; (*c*) arrival in England.

Quinotoxin, in the doses used, failed to control the temperature or cause the disappearance from the peripheral blood of parasites in cases of simple tertian malaria (*vide* charts).

In a previous paper (1918), we have on the contrary shewn that grains 5 of quinine sulphate on each of two consecutive days only, caused the disappearance of parasites in eight of twelve cases, and brought the temperature to normal within a few days in ten of twelve cases; also that grains 10 of quinine sulphate on each of two consecutive days caused the disappearance of the parasites and fall of the temperature to normal in all of ten cases.

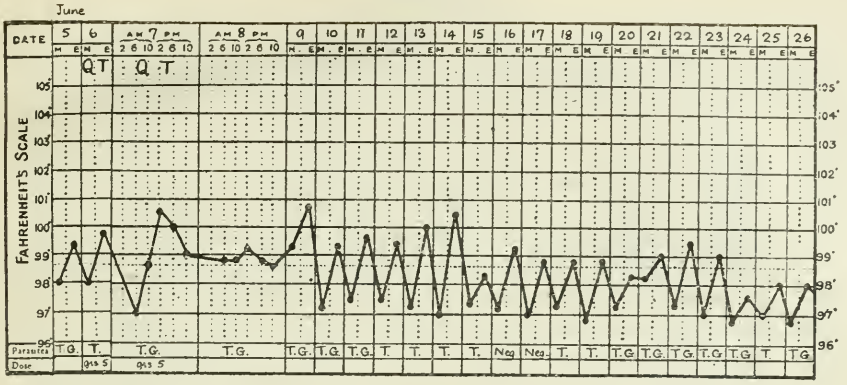
TABLE

Summary of results of administration of quinotoxin in simple tertian malaria.

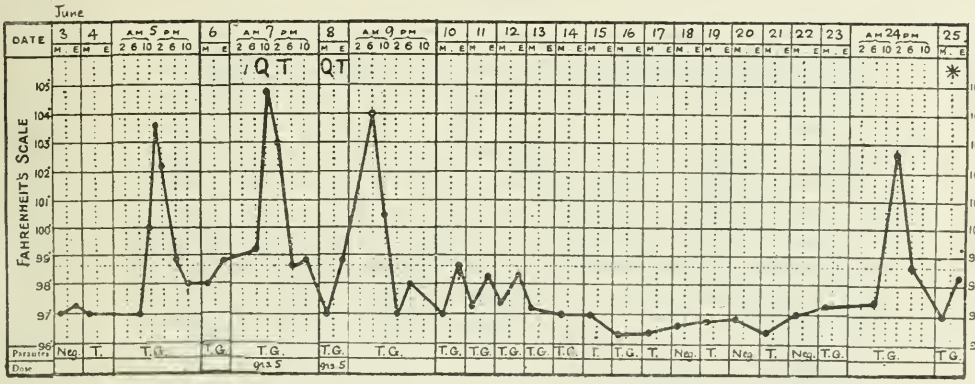
* S = Salonika. E.A. = East Africa.

Number of case	Place of infection	Interval (in months) between first admission to a hospital with malaria and present treatment	Interval (in months) between leaving infected area and date of present treatment	Interval (in months) between arrival in England and present treatment	Date of end of treatment	Result of treatment
914	S.*	9	4	4	7.6.18	Parasites persist; temperature uncontrolled.
915	E.A.	9	4	3	8.6.18	Parasites persist; temperature fell to normal in two days.
916	S.	21	6	1	12.6.18	Parasites persist; temperature uncontrolled.
917	S.	19	5	4	12.6.18	Parasites persist; temperature uncontrolled.
918	S.	9	2	1	12.6.18	Parasites persist; temperature uncontrolled.
919	S.	23	2	1	14.6.18	Parasites persist; temperature fell to normal in two days.
920	S.	4	1	0	25.6.18	Parasites persist; temperature uncontrolled.
921	S.	11	1	0	25.6.18	Parasites persist; temperature uncontrolled.
922	S.	7	2	1	26.6.18	Parasites persist; temperature uncontrolled.

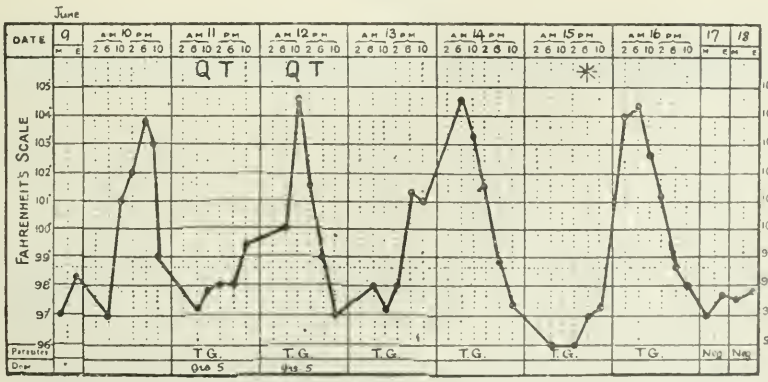
Case 914



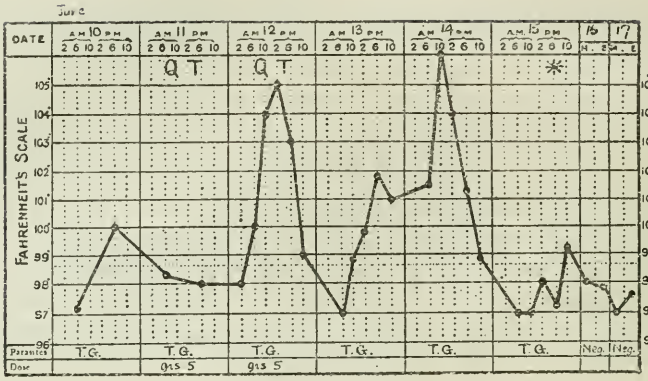
Case 915



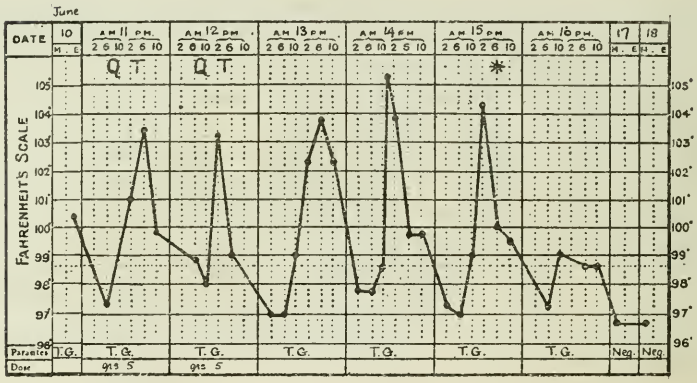
Case 916



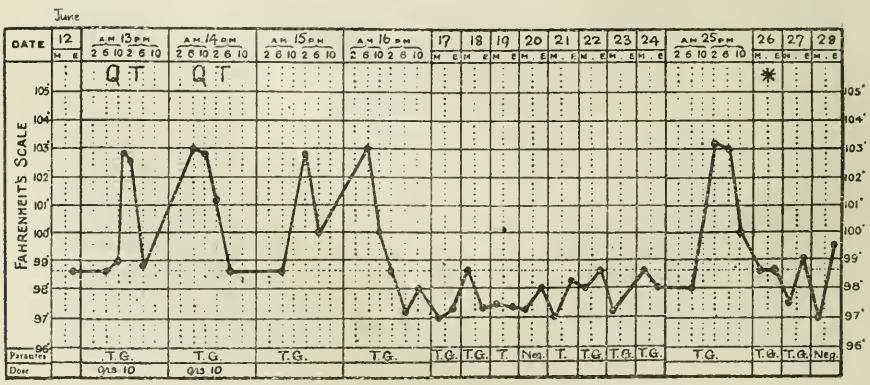
Case 917



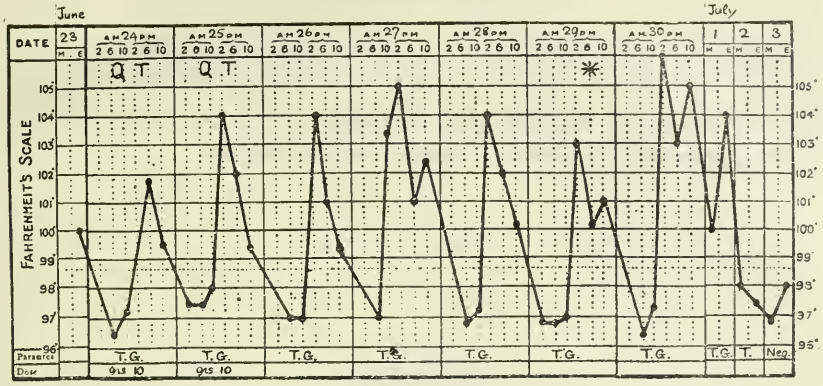
Case 918



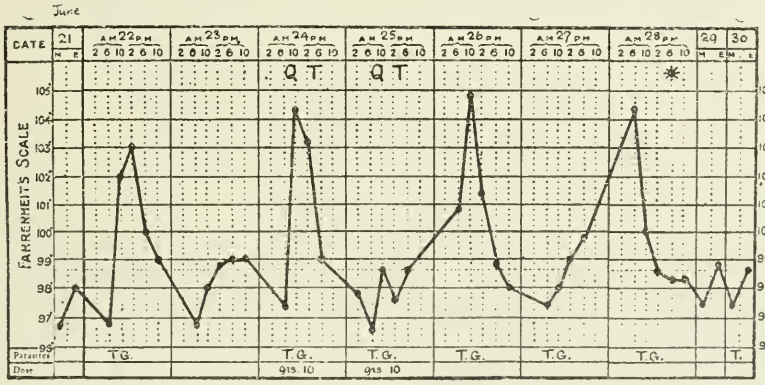
Case 919



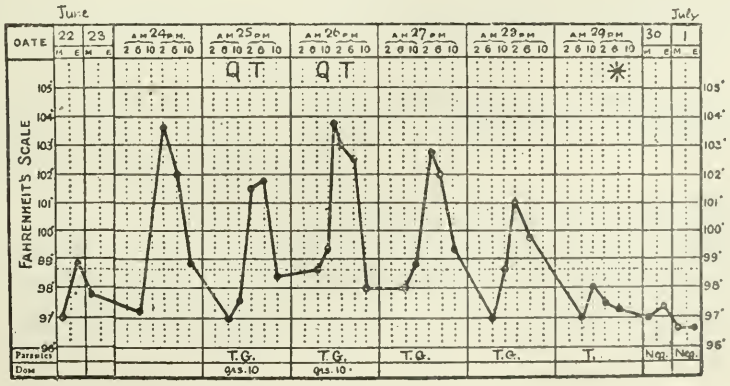
Case 920



Case 921



Case 922



CONCLUSION

Quinotoxin hydrochloride in the doses used, grains 5 and grains 10 on each of two consecutive days, has practically no action on the parasites or the fever, and so is inferior in its action to similar doses of quinine sulphate in simple tertian malaria.

REFERENCE

Stephens, J. W. W., Yorke, W., Blacklock, B., Macfie, J. W. S., Cooper, C. F., and Carter, H. F. (1918). *Ann. Trop. Med. & Parasitol.*, Vol. XI. pp. 284 and 289.